

VERDI HYDROELECTRIC PROJECT PENSTOCK REPLACEMENT

The Verdi Hydroelectric Project is owned and operated by the Truckee Meadows Water Authority (TMWA). The project, located approximately 11 miles west of Reno, Nevada, diverts water from the Truckee River to generate power. The features of the project include a canal, forebay, intake structure, wood stave pipeline, surge tower, riveted steel penstock and a powerhouse. The aging wood stave pipeline leaked and was deteriorating. The pipe was 108-inch diameter, ~1400 ft long, installed above ground on wooden saddles.



TMWA commissioned EES Consulting to provide engineering services to replace the wood stave pipe with a 108-inch diameter steel pipe. Scott

Mahnken was the engineering project manager for the work. The work involved designing the new pipeline, writing technical specifications and preparing contract documents. To get the project online as quickly as possible, a separate procurement contract was tendered to purchase the pipe. This allowed fabrication to begin while a pipeline installation contract was being bid. EES Consulting prepared construction details and specifications for installing the pipe. Installation of flow metering equipment was also included. The installation of the pipe began on schedule in April 2005 and was completed on time and within budget.